

REMARKS

The application is believed to be in condition for allowance.

Claims 1-8 are pending with claims 1 and 3 being independent.

There are no formal matters outstanding.

The Official Action rejected claims 1-8 as obvious over KOEMAN et al. 5,731,706 in view of JOLLOTA 6,341,159.

The present invention concerns a method and system for improving a transmission characteristic of an xDSL system, wherein the existing cross-talk noise caused by other subscriber telephone lines is measured on a candidate subscriber telephone line. As shown in Figure 2 of the present application, a voltage measurement is made across the T and R connections of the subscriber telephone line.

The invention tests the telephone lines for cross-talk existing on the telephone line due to interference from other subscriber telephone lines within the limited frequency range delimited by xDSL use. The inventive testing system transforms a level of cross-talk noise on the subscriber telephone line, in the frequency range of interest, to noise spectrum data by FFT and compares said noise spectrum data with a template for noise level decision to thereby determine whether or not the candidate subscriber telephone line is usable within a frequency range up

to 1 MHz for xDSL use. The present invention need not look outside the xDSL frequency range.

KOEMAN et al. is not seen to poll an xDSL circuit as KOEMAN et al. polls a LAN circuit.

KOEMAN et al. discloses testing the quality of a **LAN cable system** by injecting a **pulse signal** into the telephone line and measuring a response signal so as to assess the quality of the LAN cable system. See KOEMAN et al. Figure 5 disclosing source signal generator 202 with pulse generator 206 providing a stimulus signal into the LAN cable system 14 and receiver 208 measuring the responsive signal.

The present invention does not inject a signal into the lines but rather measures cross-talk, within the xDSL frequency, caused by adjacent subscriber lines.

KOEMAN et al. is not concerned with the xDSL frequency which extends up to 1 MHz. See Figure 1 of the application.

Rather, KOEMAN et al. is based on NEXT loss which concerns loss over a range of 1 to 100 MHz. See column 2, lines 56-63 indicating sampling at .15 and .25 MHz intervals over the range 1 MHz through 100 MHz. The tests are driven by the TIA standard TSB 76 (column 2, lines 4-9).

This is outside the range of xDSL use and beyond the range recited in the amended claims. As LAN frequencies increase, KOEMAN et al. would likewise be extended over a greater

range. There is no reason that KOEMAN et al. would be applied to the limited xDSL frequency range.

The teaching of JOLLOTA would be that the KOEMAN et al. system/method could be used at a telephone central office or as part of a craftsperson's test set. Even so modified, KOEMAN et al. concerns a frequency outside that recited.

Also, although JOLLOTA may measure cross-talk without injecting a signal, this does not transfer to KOEMAN et al. KOEMAN et al. injects the test signal to perform the necessary noise measurements for Power Sum Next loss measurement.

Thus, with or without the JOLLOTA teachings, KOEMAN et al. teaches a system and method concerning a frequency range outside of that recited by the claims, and one that requires a test input signal.

In view of the noted differences between the recited invention and the references, both individually and in reasonable combination, the obviousness rejection is not believed to be viable. Reconsideration and allowance of all the pending claims are respectfully requested.

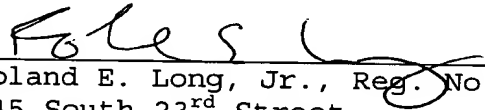
Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted,

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